

CLAIMS

1. A method for receiving digital data, the method comprising:
receiving a plurality of RF carriers, at least two carriers of the plurality of
5 carriers divided into a periodic series of timeslots for each carrier, where each timeslot
in the periodic series of timeslots is able to carry independent data content, the at least
two carriers each modulated with different portions of a single data stream during at
least one timeslot of each carrier within the periodic series of timeslots;
demodulating the at least two carriers to detect the different portions of the
10 single data stream; and
assembling the different portions of the single data stream to reconstruct the
single data stream.
2. The method according to claim 1, further comprising selectably receiving the
15 single data stream on a dedicated carrier, the dedicated carrier divided into a periodic
plurality of dedicated timeslots, the single data stream being periodically modulated
during at least one of the periodic plurality of dedicated timeslots, the dedicated
timeslots being longer than the at least one timeslot.
- 20 3. The method according to claim 1, wherein the at least one timeslot comprises
at least two timeslots that are divided among at least two carriers, wherein the at least
two timeslots occur simultaneously.

4. The method according to claim 3, the at least two carriers further comprise a service timeslot, and further comprising deactivating the receiver during at least a period of time outside of the at least one timeslot and the service timeslot.

5 5. The method according to claim 1, further comprising adjusting a number of timeslots within the at least one timeslot by one of adding at least one timeslot and de-allocating at least one timeslot.

6. The method according to claim 5, wherein the adjusting is performed in
10 response to an event that changes a current data bandwidth requirement.

7. A method for transmitting digital data, the method comprising:
accepting a single data stream;
dividing the single data stream into different portions; and
15 modulating a plurality of RF carriers, at least two carriers of the plurality of carriers divided into a periodic series of timeslots for each carrier, where each timeslot in the periodic series of timeslots is able to carry independent data content, the at least two carriers each modulated with the different portions during at least one timeslot of each carrier within the periodic series of timeslots.

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8. A wireless device, comprising:

a wireless receiver that receives a plurality of RF carriers, at least two carriers of the plurality of carriers divided into a periodic series of timeslots for each carrier, where each timeslot in the periodic series of timeslots is able to carry independent data content, the at least two carriers each modulated with different portions of a single data stream during at least one timeslot of each carrier within the periodic series of timeslots;

a demodulator, communicatively coupled with the wireless receiver, for demodulating the at least two carriers to detect the different portions of the single data stream; and

a demultiplexer, communicatively coupled with the demodulator, for assembling the different portions of the single data stream to reconstruct the single data stream.

9. The wireless device according to claim 8, therein the wireless receiver further selectably receives the single data stream on a dedicated carrier, the dedicated carrier divided into a periodic plurality of dedicated timeslots, the single data stream being periodically modulated during at least one of the periodic plurality of dedicated timeslots, the dedicated timeslots being longer than the at least one timeslot.

10. The wireless device according to claim 8, wherein the at least one timeslot of each carrier within the periodic series of timeslots occur simultaneously.

11. The wireless device according to claim 10, wherein the at least two carriers further comprising a service timeslot, and at least one of the wireless receiver, the demodulator, and the demultiplexer, deactivate during at least a period of time outside of the at least one timeslot and the service timeslot.

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12. The wireless device according to claim 8, wherein at least one of the wireless receiver, the demodulator, and the demultiplexer, further adjusts a number of timeslots within the at least one timeslot by at least one of adding at least one timeslot and de-allocating at least one timeslot.

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13. The wireless device according to claim 12, wherein at least one of the wireless receiver, the demodulator, and the demultiplexer, adjusts the number of timeslots in response to an event that changes a current data bandwidth requirement.

14. A computer program product comprising computer programming instructions for receiving digital data, the computer programming instructions comprising instructions for:

wirelessly receiving a plurality of RF carriers, at least two carriers of the plurality of carriers divided into a periodic series of timeslots for each carrier, where each timeslot in the periodic series of timeslots is able to carry independent data content, the at least two carriers each modulated with different portions of a single data stream during at least one timeslot of each carrier within the periodic series of timeslots;

demodulating the at least two carriers to detect the different portions of the single data stream; and

assembling the different portions of the single data stream to reconstruct the single data stream.

15. The computer program product according to claim 14, further comprising instructions for selectably receiving the single data stream on a dedicated carrier, the dedicated carrier divided into a periodic plurality of dedicated timeslots, the single data stream being periodically modulated during at least one of the periodic plurality of dedicated timeslots, the dedicated timeslots being longer than the at least one timeslot.

16. The computer program product according to claim 14, wherein the at least one timeslot comprises at least two timeslots that are divided among at least two carriers, wherein the at least two timeslots occur simultaneously.
- 5 17. The computer program product according to claim 16, wherein the at least two carriers further comprising a service timeslot, and the computer program product further comprising instructions for deactivating the receiver during at least a period of time outside of the at least one timeslot and the service timeslot.
- 10 18. The computer program product according to claim 14, further comprising instructions for adjusting a number of timeslots within the at least one timeslot by one of adding at least one timeslot and de-allocating at least one timeslot.
- 15 19. The computer program product according to claim 18, wherein the instructions for adjusting are performed in response to an event that changes a current data bandwidth requirement.